

**SOUTH CAROLINA
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
AIR POLLUTION CONTROL REGULATIONS AND STANDARDS**

**REGULATION 61-62.5
AIR POLLUTION CONTROL STANDARDS**

**STANDARD NO. 6
ALTERNATIVE EMISSION LIMITATION OPTIONS
("Bubble")**

SECTION I - GENERAL

This "bubble" policy provides procedures which allow existing plants to be excused from installing pollution controls at one or more emission sources in exchange for compensating increases in control at other emission sources. Each "bubble" must be equivalent to the original emission limits in terms of ambient impact and enforceability. Bubbles can not be used to meet technology based requirements applicable to new sources.

Alternative emission limitation options neither apply to nor supersede the requirement that a plant must meet the emission limitations of Prevention of Significant Deterioration, New Source Performance Standards, National Emissions Standards for Hazardous Air Pollutants, or any other conditions which the Federal Clean Air Act mandates.

In order for a source to be eligible to use this option, it must be a source subject to emission limitations set forth in the State Implementation Plan (SIP).¹

SECTION II - CONDITIONS FOR APPROVAL (Applicable to all "Bubbles")

The conditions for approval of a proposed alternative emission limitation option for any of the pollutants, total suspended particulate, sulfur dioxide, or volatile organic compounds (VOC) are as follows:

- A. the proposal must be initiated by the plant; and
- B. each proposal must assure that attainment and maintenance of NAAQS will not be jeopardized and
- C. all aspects of the proposal must be legally enforceable; and
- D. points involved must have emissions which are quantifiable and trades among them must be equal or show a net decrease; and;
- E. trades must be of the same pollutant category; and

¹ If there is no meaningful emission limitation set forth in the (SIP), a source may request that its actual emission rate be stated as an enforceable emission limitation on the appropriate permits.

F. the proposal must demonstrate equivalence or improvement of air quality impact from the proposed trades; and

G. pollutants designated as hazardous may only be used to “bubble” if the proposal would result in a decrease of the hazardous pollutant; and

H. emission reductions below the allowable emission rates are not used simultaneously as an emission offset and in an alternative set of emission limitations.

SECTION III - PUBLIC PARTICIPATION PROCEDURES

All “bubble” proposals shall be subject to public participation as follows:

A. The Department shall make a preliminary determination whether the application for an alternative emission limitations option should be approved, approved with conditions, or disapproved. A copy of all materials pertaining to the application and the preliminary determination shall be made available in at least one location in the area of the application for the proposed alternative set of limitations.

B. In the geographic area of the proposed action the public shall be notified of the application, the preliminary determination, the draft permits, and the opportunity for written public comment for 30 days following public notification. A public hearing shall be held to receive written or oral comments on the proposed action if a hearing is requested in writing within 15 days following public notification. The applicant will be given the opportunity to respond to any comments submitted by the public.

C. The Department shall make a final determination whether the application should be approved, approved with conditions, or disapproved; and notify the applicant. The final determination, permits, and public comments shall be made available for public inspection at the same location where the Department made available the preliminary determination.

D. A copy of the application, preliminary determination, notice of public hearing, final determination, permits, and pertinent materials shall be transmitted to the EPA.

SECTION IV - ADDITIONAL CONDITIONS AND PROCEDURAL REQUIREMENTS FOR APPROVAL

Part A - Emissions of Particulate Matter or Sulfur Dioxide

1. No air quality modeling or SIP revision will be required for use of an alternative emission limitation option if all of the following conditions are met:

- a. There is no net increase in actual emissions; and
- b. The relevant emission points are in the same immediate vicinity (approximately 100 meters); and
- c. The relevant emission points are of similar effective stack height (approximately plus or minus 10%).

2. Or a SIP revision and limited air quality modeling involving only the specific emission sources in the “bubble” will be required for sources not qualifying under paragraph 1 above provided there is no net increase in actual emissions. The modeling must show that the proposed “bubble” will not cause a significantly greater air quality impact than the impact of the original emission sources if required to meet the limitations of the

Regulations individually.

A “significantly greater impact” is one that equals or exceeds:

1.0 $\mu\text{g}/\text{m}^3$ on annual basis for TSP and SO_2 .

5.0 $\mu\text{g}/\text{m}^3$ on 24 hour basis for TSP and SO_2 .

25.0 $\mu\text{g}/\text{m}^3$ on 3 hour basis for SO_2 .

3. Or a SIP revision and full dispersion modeling, considering all sources in the area of impact, will be required for any alternative emission limitation option not fulfilling the requirements for consideration under either paragraph 1. or 2. above.

a. Modeling must show that use of the bubble policy will neither create a new ambient violation nor interfere with reasonable further progress toward attaining National Ambient Air Quality Standards as planned in the SIP; and

b. Modeling must show that use of the bubble will not create an increment violation under the Prevention of Significant Deterioration regulations (Standard No. 7).

Part B. - Emissions of Volatile Organic Compounds

1. An owner or operator may apply to the Department to be bound by an alternative set of volatile organic compounds (VOC) emission limitations for the emission points at the plant(s) provided the alternative set of limitations does not result in an increase in total VOC emissions. That is, the sum of those alternative limitations must be equal to or less than the sum of the limitations for those points previously imposed by the State Implementation Plan (SIP).

Where no specific emission limitations are imposed by the SIP, i.e., no VOC regulations have been adopted which cover those VOC emissions, the actual emission rate of VOC from such points shall be the baseline for the original limitations used for comparison with the proposed alternative set of limitations.

“Actual emissions” means the actual rate of emissions of a pollutant from an emissions unit as determined in accordance with the following:

a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal plant operation. The reviewing authority shall allow the use of a different time period upon a determination that it is more representative of normal plant operation. Actual emissions shall be calculated using the unit’s actual operating hours, production rates, and types of materials processed, stored or combusted during the selected time period.

b. The reviewing authority may presume that plant specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

c. For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

Should future regulations require a greater reduction from such points, the newer emission limitation must be

met by the compliance date specified in the future regulations.

2. An application for approval of an alternative set of VOC emissions limitations shall include the:

- a. identification and vapor pressure at standard conditions of each VOC; and
- b. concentration by volume and the emission rate of each VOC; and
- c. volumetric discharge flow rate and temperature of each VOC gas stream; and
- d. other information requested by the Department in order to review the application.

3. The Department may approve an alternative set of VOC emission limitations provided:

a. the VOC emission points involved in the proposed alternative set of emission limitations are within 50 kilometers of each other; and

b. the sum of the alternative set of VOC emission limitations does not exceed the sum of the maximum allowable emission rates contained in the SIP, where the maximum allowable emission rate for existing emission points not otherwise specified in the SIP shall be the actual VOC emissions; and

c. calculations of the hourly combined emission rate are based on the uninterrupted operation at normal production rates of all included operations. If the same equipment is used for manufacturing more than one product, the operation having the highest emission rate must be included; and

d. the alternative set of emission limitations does not supersede requirements of South Carolina Air Pollution Control Regulations for new or modified sources.

e. actual emissions of VOC from existing sources within designated nonattainment areas shall not be allowed to increase beyond the amount of growth allowance (over-all reductions provided for in the State Implementation Plan) remaining in the nonattainment area, as a result of bubbling.

Part C. - De Minimis Cases

Where bubbles involve small plants whose total potential to emit is less than 100 tons per year, and where total emissions do not increase as a result of using the bubble policy, such bubbles may proceed without a SIP revision.

All other conditions for approval of a proposed alternative emission limitation plan must be met.

SECTION V - ENFORCEABILITY

Each emission point involved in the alternative set of emission limitations shall be assigned a specific measurable emission limitation as a condition of construction and operating permits.

Conditions on the permits must include:

1. requirements that suitable test procedures as specified by the Department shall be used to demonstrate compliance with the alternative set of emission limitations; and

2. methods and/or recordkeeping as specified by the Department to show continued compliance with the alternative set of emission limitations.

R. 61-62.5, Standard No. 6 History - *South Carolina State Register*:

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